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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/811,863	03/30/2004	Eytan Cohen	200600514-3	3839

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INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

MARTIN, LAURA E

ART UNIT	PAPER NUMBER
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2853

MAIL DATE	DELIVERY MODE
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05/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/811,863	Applicant(s) COHEN ET AL.	
	Examiner Laura E. Martin	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9, 13 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5, 9, 13, and 16 is/are allowed.
- 6) ☐ Claim(s) 6, 7, 15 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laksin et al. (US 20020068772) in view of Souder (US 4156626).

Laksin et al. discloses the following claim limitations:

As per claim 6: an ink having molecules of material capable of undergoing a polymerization reaction under the influence of microwave radiation [0021]; a thermal initiator [0076] and [0112-0113], printing with said ink an image bearing pattern on a substrate [0016]; and irradiating by microwave radiation said printed image bearing pattern such that said image bearing pattern is cured by heat generated by said microwave radiation [0076].

As per claim 17: the ink contains only polymerizable components that are converted into polymeric coating only after printing and by exposure to microwave radiation [0021] and [0048].

Laksin et al. do not disclose the following claim limitations:

As per claim 6: a microwave absorber to enhance absorption of microwave radiation.

Souder discloses the following claim limitations:

As per claim 6: a microwave absorber to enhance absorption of microwave radiation (column 3, lines 30-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink taught by Laksin et al. with the disclosure of Souder in order to provide a more efficient curing process and a more durable image.

Claims 7 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laksin et al. (US 20020068772) in view of Souder (US 4156626) and Aoki (US 5965252).

Laksin et al. disclose the following claim limitations:

As per claim 7: an ink having molecules of material capable of undergoing a polymerization reaction under the influence of microwave radiation [0021]; a thermal initiator [0076] and [0112-0113], printing with said ink an image bearing pattern on a substrate [0016]; and irradiating by microwave radiation said printed image bearing pattern such that said image bearing pattern is cured by heat generated by said microwave radiation [0076].

Laksin et al. do not disclose the following claim limitations:

As per claim 7: a microwave absorber for enhancing absorption of microwave radiation and printing on an optically reflecting substrate.

As per claim 15: the optically reflective substrate comprises printing on a glass surface, a plastic surface, or a marble surface.

Souder discloses the following claim limitations:

As per claim 7: a microwave absorber to enhance absorption of microwave radiation (column 3, lines 30-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink taught by Laksin et al. with the disclosure of Souder in order to provide a more efficient curing process and a more durable image.

Aoki discloses the following claim limitations:

As per claim 7: printing on an optically reflecting substrate (column 2, lines 30-37).

As per claim 15: the optically reflective substrate comprises printing on a glass surface, a plastic surface, or a marble surface (column 2, lines 30-37).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink taught by Laksin et al. with the disclosure of Aoki in order to create a wider variety of printing surfaces and uses for ink jet ink.

Allowable Subject Matter

Claims 1-5, 9, 13, and 16 are allowed.

Response to Arguments

Applicant argues that claims 6 and 7 have been amended to include limitations that are similar to that of claim 1; however, the limitation that makes claim 1 allowable, as noted in the previous Office Action, has not been put into claim 6 or claim 7. The

limitation, "molecules of material capable of undergoing a polymerization reaction under the influence of microwave radiation" is taught by Laksin et al. in [0021].

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

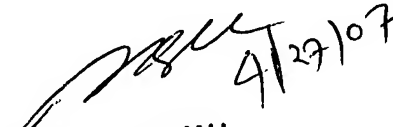
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura E. Martin whose telephone number is (571) 272-2160. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Laura E. Martin


MANISH S. SHAH
PRIMARY EXAMINER